

Title (en)

Auxiliary micro-electrodes for diagnostics of electrochemical gas sensors

Title (de)

Zusatzmikroelektroden zur Diagnose von elektrochemischen Gassensoren

Title (fr)

Micro-électrodes auxiliaires pour les diagnostics de capteurs de gaz électrochimiques

Publication

**EP 2581734 A3 20130821 (EN)**

Application

**EP 12187534 A 20121005**

Priority

- US 201161545669 P 20111011
- US 201213644485 A 20121004

Abstract (en)

[origin: EP2581734A2] A gas sensor (10) includes known types of electrodes such as sensing electrodes (20), counter electrodes (24) or reference electrodes (22) to sense the presence of a predetermined gas. In addition, at least one diagnostic electrode (12,14) is carried in the sensor. The diagnostic electrode implements at least one diagnostic function without substantially impairing the gas sensing function. The diagnostic electrode is immersed in sensor electrolyte.

IPC 8 full level

**G01N 27/404** (2006.01); **G01N 27/416** (2006.01)

CPC (source: EP US)

**G01N 27/404** (2013.01 - EP US); **G01N 27/4163** (2013.01 - EP US)

Citation (search report)

- [X1] WO 0131326 A1 20010503 - SEM CORP [US], et al
- [X1] US 5423963 A 19950613 - FLETCHER KENNETH S [US], et al
- [X1] WO 9924826 A1 19990520 - CENTRAL RESEARCH LAB LTD [GB], et al
- [X1] DE 19533911 C1 19960509 - DRAEGERWERK AG [DE]

Cited by

EP2871472A1; CN104634835A; EP3712604A1; EP4040146A1; US11307167B2; US11085896B2; US11231389B2; US9874540B2; US10976279B2; WO2018059719A1; WO2018059717A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 2581734 A2 20130417; EP 2581734 A3 20130821; EP 2581734 B1 20170208**; US 11085896 B2 20210810; US 2013087456 A1 20130411; US 2017248544 A1 20170831; US 9689833 B2 20170627

DOCDB simple family (application)

**EP 12187534 A 20121005**; US 201213644485 A 20121004; US 201715593077 A 20170511